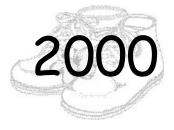
# Michigan Prams



Pregnancy Risk Assessment Monitoring System



Michigan Department of Community Health



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March, 2002

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#### **EXECUTIVE SUMMARY**

This is a summary of selected results of the 2000 Michigan Pregnancy Risk Assessment Monitoring System (PRAMS). The survey described here was conducted with a random sample of women who had given birth to a live infant in Michigan in 2000. The topics of the survey were selected based on their relevance to infant mortality and birth outcomes. Some of the highlights of the findings are presented here.

- Of pregnancies resulting in a live birth in Michigan in 2000, it was estimated that 40.2 percent were unintended (i.e., the pregnancy was not wanted or it was wanted later than it happened).
- Overall, 7.0 percent of live births were low birthweight infants. Women aged less than 20 years old were more likely to give birth to low birthweight infants than were women 20 and over.
- Almost one-third (31.6 percent) of respondents were receiving Medicaid at the time of delivery.
- Almost four in 10 respondents (36.7 percent) reported that they were receiving assistance from the Women, Infants, and Children (WIC) program.
- Prenatal care was initiated in the first trimester by 85.3 percent of the respondents.
- About 82 percent (81.8 percent) of respondents indicated that they had their first prenatal care visit as early as they had desired.
- 69.6 percent of respondents indicated that private health insurance was a source of prenatal care payments.
- More than two-thirds of respondents (67.2 percent) reported having breastfed their infant for any length of time.
- The four main reasons for stopping breastfeeding were baby not satisfied (37.4 percent), the mother did not have enough milk (33.3 percent), the infant did not breastfeed very well (28.7 percent), and having to go to work or school (28.7 percent).
- When asked about specific stressors, 74.1 percent of respondents indicated that they had experienced at least one of the stressors in the year prior to childbirth, and 18.6 percent had experienced four or more of the stressors. Stressors included items such as moving to a new home, a family death or illness, being unable to pay bills, and losing one's job.
- Overall, 24.7 percent of respondents smoked cigarettes three months before pregnancy, 15.5 percent smoked in the last three months of the pregnancy, and 21.3 percent smoked in the three month period following childbirth.
- 4.9 percent of respondents reported drinking alcohol in the last three months of the pregnancy.

#### Introduction

The Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing survey project of post-partum mothers in Michigan. PRAMS is part of an effort to reduce infant mortality and adverse birth outcomes by providing information useful for developing and implementing intervention programs and for evaluating existing programs. This data is used to monitor progress toward national and state pregnancy-related health objectives, including the increase of positive birth outcomes. PRAMS is also used to identify and monitor selected self-reported maternal behaviors and experiences that occur before, during, and after pregnancy among women who deliver live-born infants.

The indicators in this report cover a variety of topics, including low birthweight, birth control use, intendedness of pregnancy, health insurance, prenatal care, alcohol and tobacco use, major life stressors during pregnancy, intensive care for infants, hospital stays (pre-delivery and delivery), breastfeeding, resources needed and resources accessed.

The data collection methods used by PRAMS include several components. In 2000 approximately 200 post-partum women were selected monthly from a frame of eligible birth certificates and were sent mailed surveys. If the women did not initially respond, follow-ups included additional mailings and telephone contact. In order to increase participation of urban and minority women, data collection also included a hospital component. In this component, black mothers were sampled from hospital delivery logs and interviews were attempted before the mother left the hospital. A mailed questionnaire followed two to six months after the in-hospital interview, which focused on post-partum experiences (See Methodology for more details).

This report covers results from 2000 calendar year data. The body of the report provides graphical presentation of selected results. All results presented are weighted which provides estimates that are reflective of Michigan women who had a live birth in 2000 (see Appendix I for further information on weighting). Results are also presented along with demographic characteristic breakdowns in appended tables. The 95 percent confidence intervals (CI) are included in the appended tables and are referenced in the text with the  $\pm$  symbol. PRAMS data are intended to be representative of women whose pregnancies resulted in a live birth. Therefore, caution should be used in generalizing the results to all pregnant women.

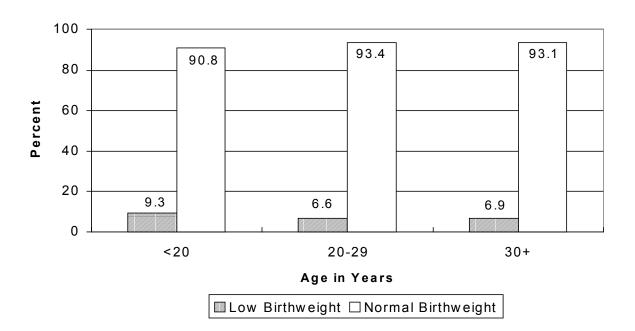
### 2000 RESULTS

#### Low Birthweight

Seven percent (7.0%, 95% CI  $\pm 0.1$ ) of respondents gave birth to infants who had low birthweight (less than 2,500 grams). The likelihood of having a low birthweight infant was related to age, with the highest levels of low birthweight infants among women less than 20 years old (Figure 1, Table 2 in Appendix II).

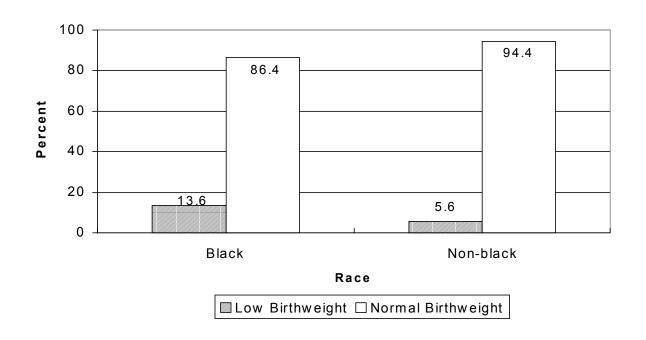
#### FIGURE 1

Percentage of Low and Normal Birthweight Infants by Mother's Age at Delivery 2000 Michigan PRAMS



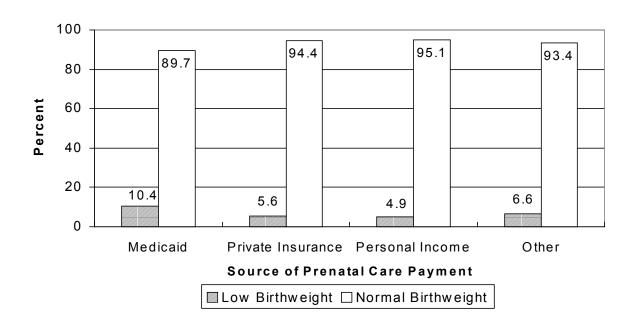
Black mothers were more than twice as likely to have a low birthweight infant than were non-black mothers (Figure 2, Table 2 in Appendix II).

FIGURE 2
Percentage of Low and Normal Birthweight Infants
by Mother's Race
2000 Michigan PRAMS



Women who had Medicaid as a source of prenatal care payments were twice as likely to have a low birthweight infant compared with women who had personal income as a source of prenatal care payments (Figure 3, Table 11 in Appendix II).

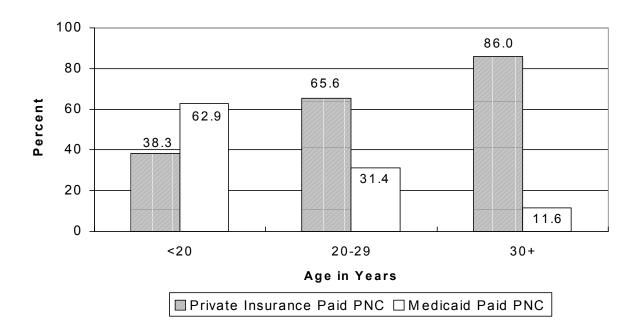
FIGURE 3
Infant's Birthweight by Source of Prenatal Care Payment 2000 Michigan PRAMS



#### Health Insurance and Medicaid Coverage of Prenatal Care

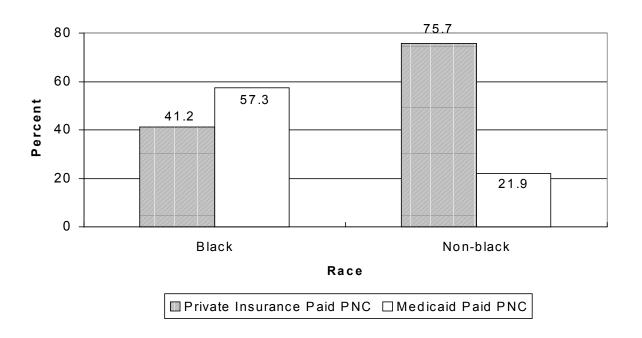
Respondents indicated whether they had private health insurance, Medicaid, personal income, or other sources of payment for prenatal care (PNC). Respondents could indicate more than one source. Over two-thirds (69.6%, 95% CI ±3.0) of respondents had private health insurance, and about one-third (28.1%, 95% CI ±2.9) had Medicaid coverage (Table 9 of Appendix II). Medicaid coverage varied by age, with about 63 percent of teenaged respondents having Medicaid pay for PNC, but only 11.6 percent of women aged 30 or older having Medicaid (Figure 4, Table 10 in Appendix II).

FIGURE 4
Percentage of Respondents Who Had Health Insurance or Medicaid Coverage for Prenatal Care by Mother's Age 2000 Michigan PRAMS



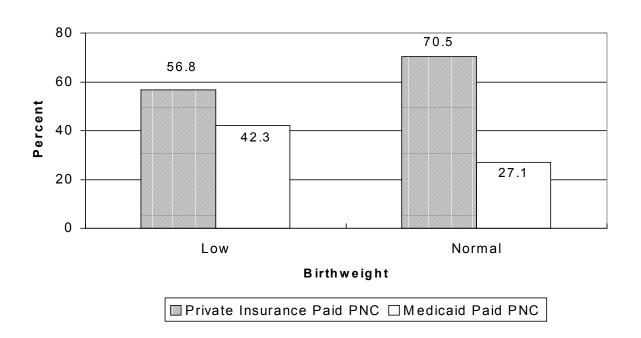
Medicaid coverage for PNC among black respondents was over twice that of non-black respondents (Figure 5, Table 10 of Appendix II).

FIGURE 5
Percentage of Respondents Who Had Health Insurance or Medicaid
Coverage for Prenatal Care by Mother's Race
2000 Michigan PRAMS



Among women with low birthweight infants, 42.3 percent (95% CI  $\pm 3.3$ ) had Medicaid coverage for PNC (Figure 6, Table 10 in Appendix II). Among women with normal birthweight infants, 27.1 percent (95% CI  $\pm 3.1$ ) had Medicaid.

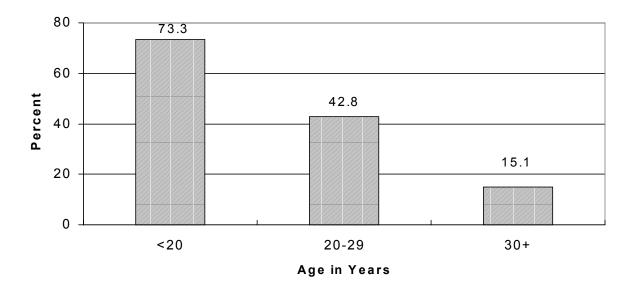
FIGURE 6
Percentage of Respondents Who Had Health Insurance or Medicaid
Coverage for Prenatal Care by Infant's Birthweight
2000 Michigan PRAMS



#### **Mothers Receiving WIC**

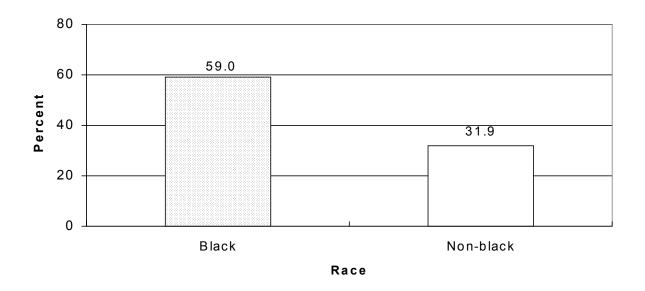
Almost 37 percent of respondents (36.7%, 95% CI  $\pm 3.2$ ) reported that they were receiving assistance from the Women, Infants, and Children program (WIC) during their pregnancy. This varied by age, however, decreasing with increasing age (Figure 7). Respondents under age 20 were almost five times as likely to be receiving WIC during their pregnancy as were women aged 30 and older (Table 18 in Appendix II).

FIGURE 7
Percentage of Respondents Receiving WIC During Pregnancy by Age 2000 Michigan PRAMS



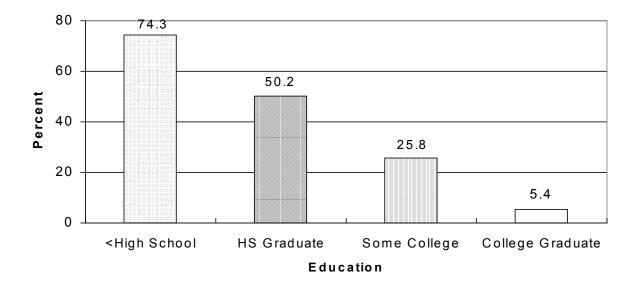
Black respondents were almost twice as likely to report being WIC participants during pregnancy compared to non-black respondents (Figure 8, Table 18 in Appendix II).

FIGURE 8
Percentage of Respondents Receiving WIC During Pregnancy by Race 2000 Michigan PRAMS



The proportion of respondents participating with WIC during pregnancy declined dramatically with education from 74.3 percent (95% CI  $\pm 6.9$ ) among respondents with less than a high school diploma to 5.4 percent (95% CI  $\pm 2.8$ ) among respondents with a college degree (Figure 9, Table 18 in Appendix II).

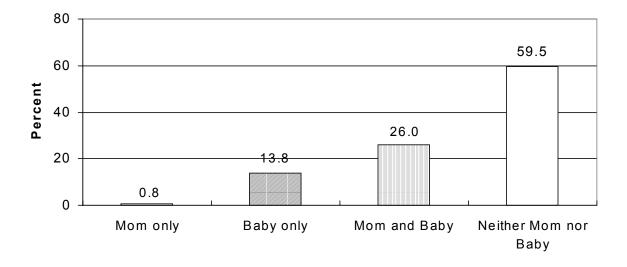
FIGURE 9
Percentage of Respondents Receiving WIC During Pregnancy
by Educational Level
2000 Michigan PRAMS



# Percentage of Mothers and Babies Receiving WIC During the Early Postpartum Period

Twenty six (95% CI  $\pm$ 3.0) percent of respondents did receive WIC for themselves and their baby during the early postpartum period whereas almost 60 percent (59.5%, 95% CI  $\pm$ 3.3) did not. Almost 14 percent (13.8%, 95% CI  $\pm$ 2.3) of babies received WIC, and almost 1 percent of mothers (0.8%, 95% CI  $\pm$ 0.5) (Figure 9A, Table 19 in Appendix II).

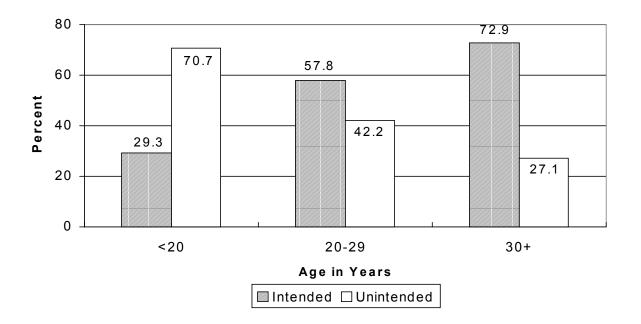
FIGURE 9a
Percentage of Mothers and Babies Receiving WIC
During the Early Postpartum Period
2000 Michigan PRAMS



#### **Unintended Pregnancies**

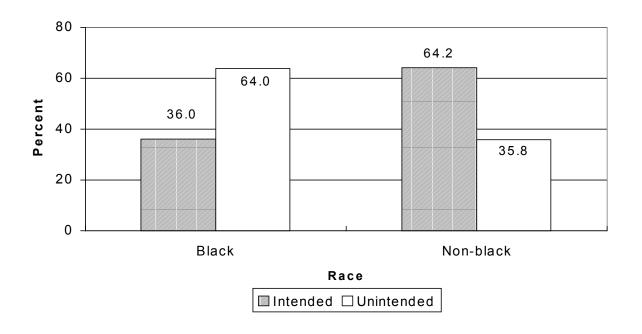
Forty percent of live births in Michigan in 2000 resulted from pregnancies that were unintended  $(40.2\%, 95\% \text{ CI} \pm 3.4)$ . Intended was defined as becoming pregnant when it was wanted or later than it was wanted. Unintended was defined as becoming pregnant sooner than was wanted or not wanting to become pregnant (See Table 3 and 4 in Appendix II for more information). Age was related to this indicator. Teenaged women were more likely to give birth as a result of an unintended pregnancy  $(70.7\%, 95\% \text{ CI} \pm 9.4)$ , compared to women in their  $20s (42.2\%, 95\% \text{ CI} \pm 4.8)$  and those over age  $29 (27.1\%, 95\% \text{ CI} \pm 5.1)$  (Figure 10, Table 4 in Appendix II).

FIGURE 10
Percentage of Unintended Live Births by Mother's Age 2000 Michigan PRAMS



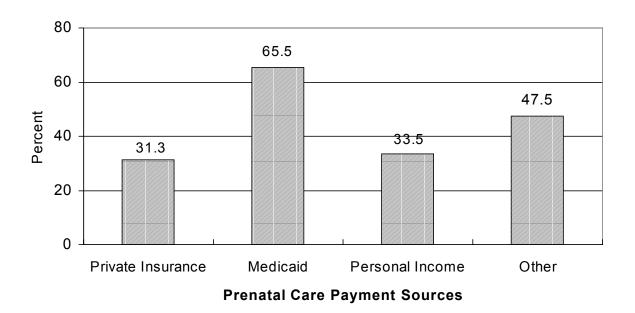
Among black respondents, 64.0 percent of live births were the result of an unintended pregnancy,  $(64.0\%, 95\% \text{ CI} \pm 4.0)$ , which was nearly twice the proportion of unintended pregnancy among non-black respondents  $(35.8\%, 95\% \text{ CI} \pm 4.0)$  (Figure 11, Table 4 in Appendix II).

FIGURE 11
Percentage of Unintended Live Births by Mother's Race
2000 Michigan PRAMS



Among women who had Medicaid-paid prenatal care, two-thirds had unintended pregnancies,  $(65.5\%, 95\% \text{ CI} \pm 5.8)$ , which was a large proportion compared to women who had other sources of payment for prenatal care (Figure 12, Table 26 in Appendix II).

FIGURE 12
Percentage of Unintended Live Births
by Prenatal Care Payment Source
2000 Michigan PRAMS

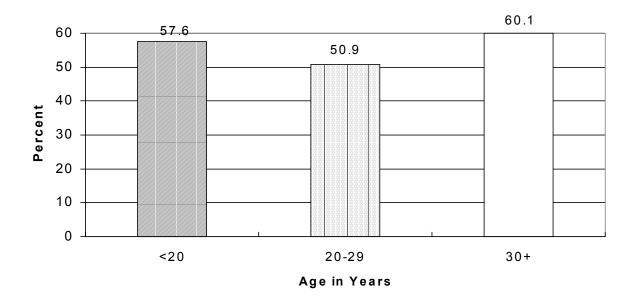


#### **Birth Control Use Among Women Not Intending Pregnancy**

Over half of the respondents who were not intending pregnancy (54.5%, 95% CI  $\pm 5.5$ ) (see Table 5 in Appendix II) were using some method of birth control at the time the pregnancy occurred. Younger respondents who did not intend pregnancy and women over 30 were more likely to report the use of birth control at the time pregnancy occurred compared with respondents 20 to 29 years of age. (Figure 13, Table 5 in Appendix II).

FIGURE 13

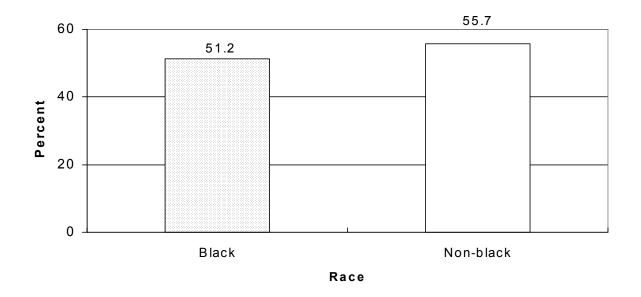
Use of Birth Control at the Time Pregnancy Occurred Among Mothers Who Did Not Intend to Become Pregnant by Mother's Age 2000 Michigan PRAMS



There was little difference in the use of birth control by race among women who had not intended pregnancy (Figure 14, Table 5 in Appendix II).

FIGURE 14 Use of Birth Control at the Time Pregnancy Occurred Among Mothers Who Did Not Intend to Become Pregnant by Mother's Race

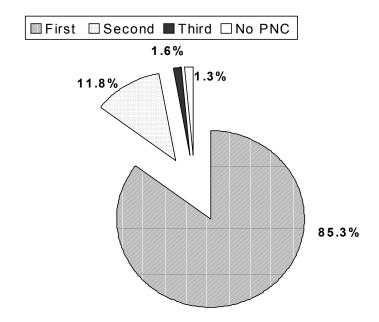
2000 Michigan PRAMS



#### **Prenatal Care**

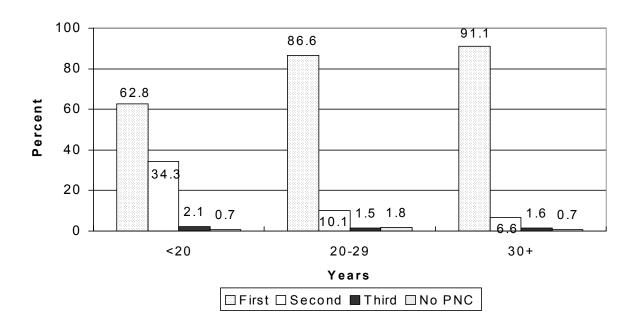
Prenatal care was initiated during the first trimester by 85.3 percent (95% CI  $\pm$ 2.4) of the respondents in 2000 Michigan PRAMS (Figure 15, Table 6 in Appendix II).

FIGURE 15
Trimester When Prenatal Care Was Started
2000 Michigan PRAMS



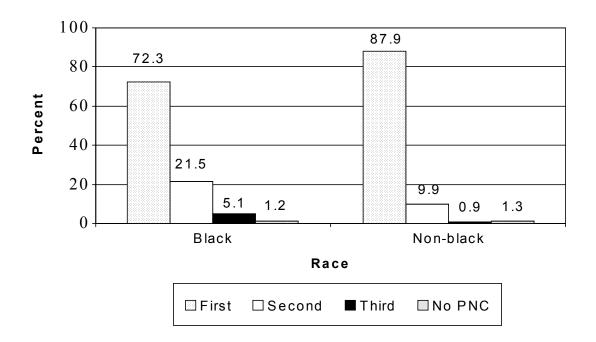
Respondents aged 20 or older were more likely to initiate prenatal care during the first trimester compared to teenage respondents (Figure 16, Table 6 in Appendix II).

FIGURE 16
Trimester When Prenatal Care Started by Mother's Age 2000 Michigan PRAMS



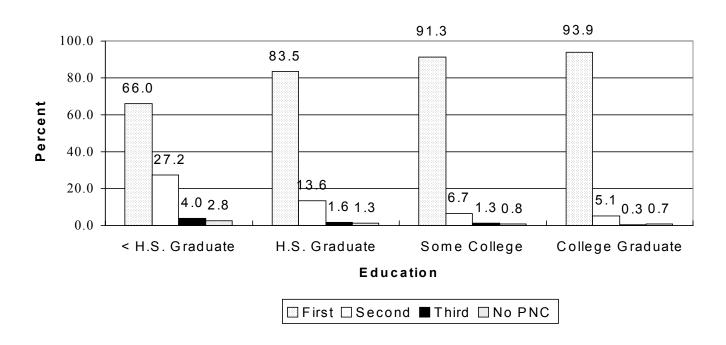
Non-black respondents were more likely to initiate prenatal care during the first trimester compared to black respondents (Figure 17, Table 6 in Appendix II).

FIGURE 17
Trimester When Prenatal Care Started by Mother's Race 2000 Michigan PRAMS



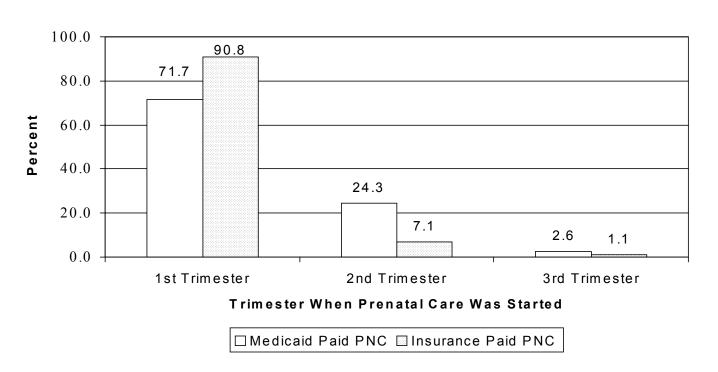
Education level was also related to when prenatal care was started. Respondents who had higher levels of education were more likely to report initiating prenatal care in the first trimester, compared to respondents with lower levels of education (Figure 18, Table 6 in Appendix II).

FIGURE 18
Trimester When Prenatal Care Started by Mother's Education Level 2000 Michigan PRAMS



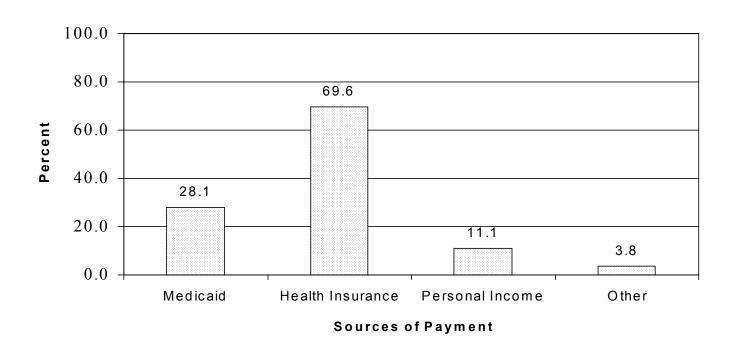
Among respondents who had Medicaid-paid PNC, 71.7 percent (95% CI  $\pm$  5.4) started PNC in the first trimester (Figure 19). Among respondents who had private insurance pay for PNC, 90.8 percent (95% CI  $\pm$  2.4) began PNC in the first trimester. Respondents who had Medicaid-paid PNC were three times as likely to have PNC initiated in the second trimester compared to respondents with private insurance (Figure 19, Table 6A in Appendix II).

FIGURE 19
Trimester When Prenatal Care Started by Source of
Prenatal Care Payments
2000 Michigan PRAMS



Respondents were asked the sources of payment for their prenatal care. Some indicated more than one source of care payment, thus the percents add up to more than 100 percent. Almost 70 percent of respondents indicated that private health insurance was a source of payment for the costs of prenatal care, and 11.1 percent indicated that personal income was a source of payment for the costs of prenatal care (Figure 20, Table 9 in Appendix II).

FIGURE 20
Distribution of Sources of Payment for Prenatal Care (%)
2000 Michigan PRAMS



Respondents were asked if they had received the first prenatal care visit as early as they had desired. About 82 percent (81.8%, 95% CI  $\pm$ 2.6) indicated that they had received the first prenatal care visit as early as they had desired (Figure 21, Table 7 in Appendix II).

FIGURE 21
Percentage of Respondents Who Started Prenatal Care as Early as They Desired 2000 Michigan PRAMS

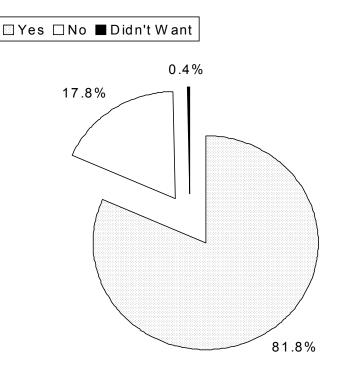


FIGURE 26
Topics Addressed by Health Care Professionals During Prenatal Care Visits (%)
2000 Michigan PRAMS

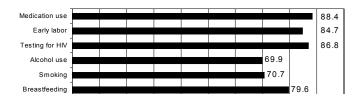
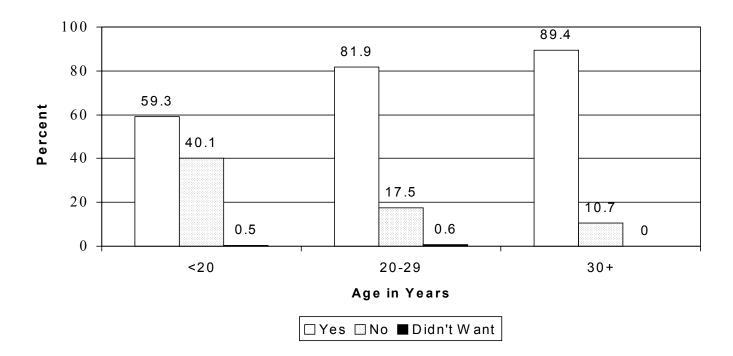
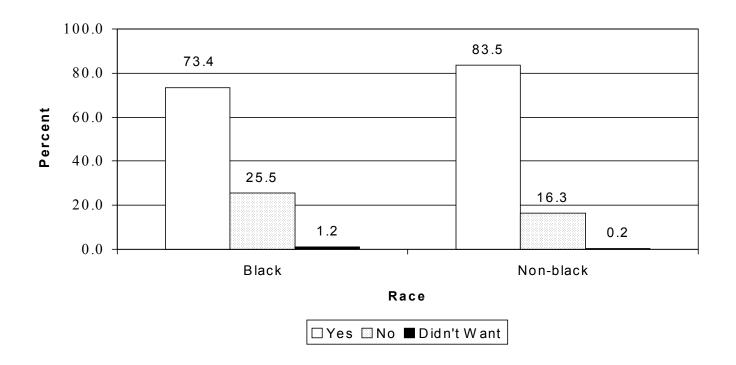


FIGURE 22
Percentage of Respondents Who Started Prenatal Care as Early as They Desired by Mother's Age 2000 Michigan PRAMS



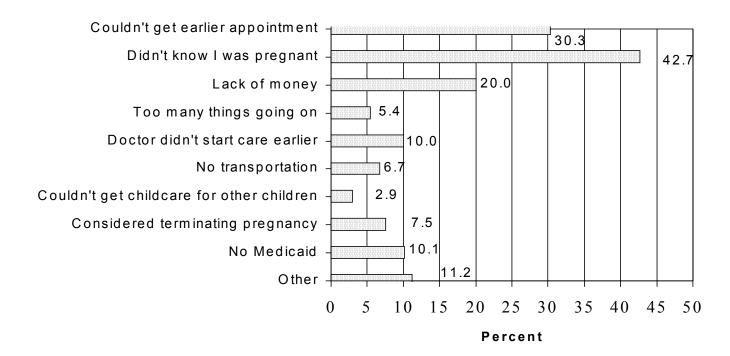
Non-black respondents (83.5%, 95% CI  $\pm$  3.1) were more likely to affirm that they had received the first prenatal care visit as early as they had desired compared to black respondents (73.4%, 95% CI  $\pm$  3.4) (Figure 23, Table 7 in Appendix II).

FIGURE 23
Percentage of Respondents Who Started Prenatal Care as Early as They Desired by Mother's Race 2000 Michigan PRAMS



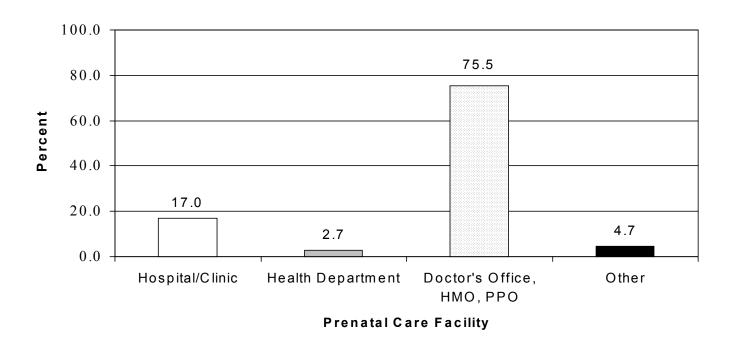
Among those who did not receive prenatal care as early as desired, almost one-third indicated that they had difficulty getting an appointment, and another 43 percent (42.7%, 95% CI  $\pm$  7.7) indicated that they had not realized that they were pregnant (Figure 24, Table 8 in Appendix II).

FIGURE 24
Reasons for Not Starting Prenatal Care as Early as Desired (%)
2000 Michigan PRAMS



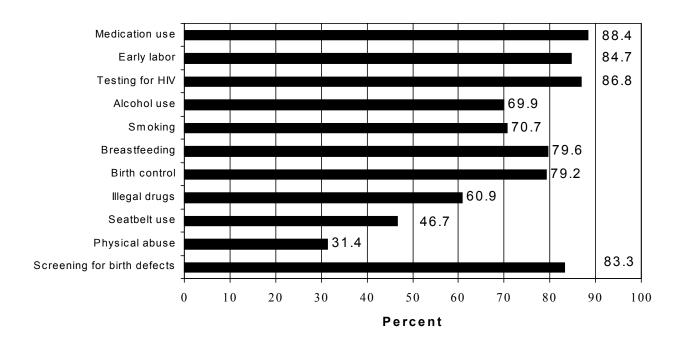
Most of the prenatal care services were delivered at a physician's office or an HMO or PPO clinic (75.7%, 95%  $CI \pm 2.7$ ) (Figure 25, Table 12 in Appendix II).

FIGURE 25
Distribution of Facilities Where Prenatal Care Was Received (%)
2000 Michigan PRAMS



Respondents indicated whether on any of their prenatal care visits a doctor, nurse or other health care worker had talked with them about specific topics. Most respondents reported that a health care provider had discussed medication use, early labor, testing for HIV, and screening for birth defects during a prenatal care visit, but less than one-third  $(31.4\%, 95\% \text{ CI} \pm 3.1)$  reported that a health care provider had discussed physical abuse of women by their husbands or partners (Figure 26, Table 13 in Appendix II).

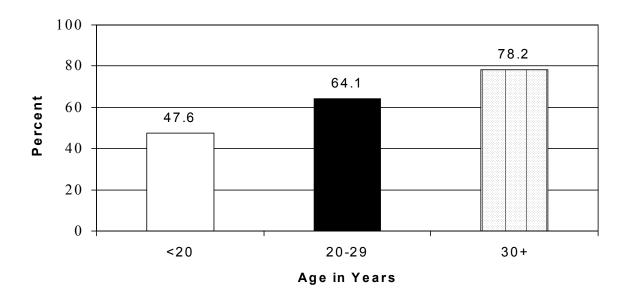
FIGURE 26
Topics Addressed by Health Care Professionals During Prenatal Care Visits (%)
2000 Michigan PRAMS



## **Breastfeeding**

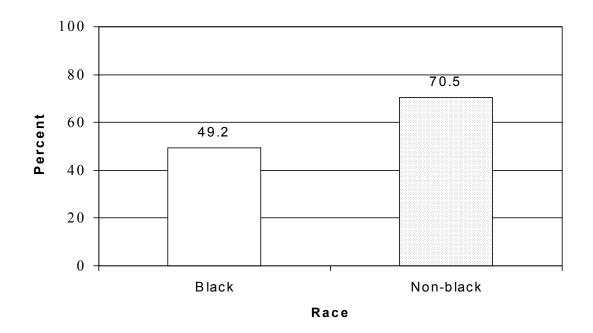
Breastfeeding was defined as a mother having breastfed her newborn for any length of time, including less than one week. Overall, 67.2 percent (95%  $CI \pm 3.2$ ) of respondents breastfed their newborns. The likelihood of breastfeeding increased with age (Figure 27, Table 15 in Appendix II).

FIGURE 27
Percentages of Mothers Who Ever Breastfed by Mother's Age 2000 Michigan PRAMS



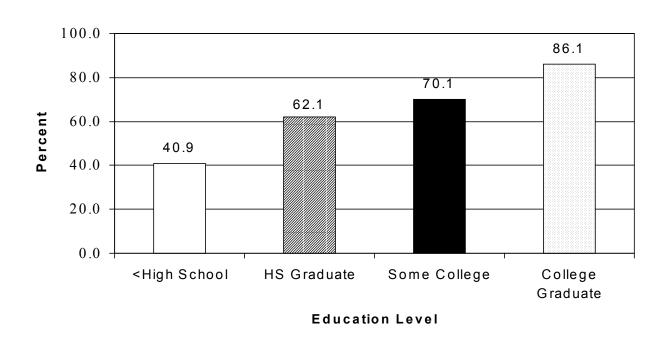
The proportion of non-black respondents who indicated that they breastfed their newborns (70.5%, 95% CI  $\pm$  3.8) was much higher than for black respondents (49.2%, 95% CI  $\pm$  4.1); (Figure 28, Table 15 in Appendix II).

FIGURE 28
Percentages of Mothers Who Ever Breastfed by Mother's Race 2000 Michigan PRAMS



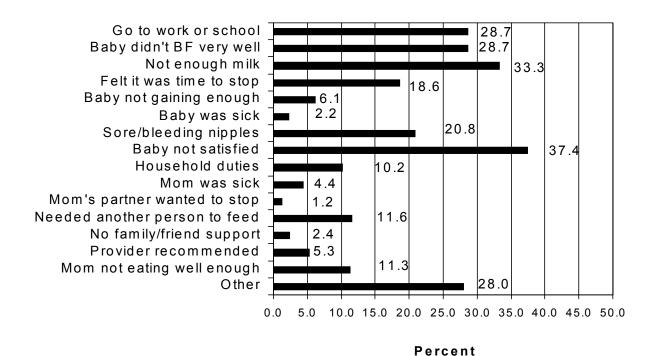
The proportion of respondents who indicated that they breastfed their newborns also increased with the mother's education level, and ranged from 40.9 percent,  $(95\% \text{ CI} \pm 8.9)$  among non-high school graduates to 86.1 percent  $(95\%, \text{ CI} \pm 4.9)$  among college graduates (Figure 29, Table 15 in Appendix II).

FIGURE 29
Percentages of Mothers Who Ever Breastfed by Mother's Education Level 2000 Michigan PRAMS



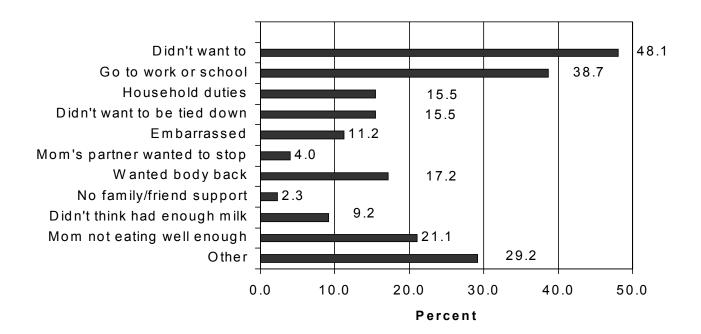
Among respondents who had breastfed their newborns initially and had stopped breastfeeding at the time of the survey, the top four reasons for stopping breastfeeding were: the baby was not satisfied (37.4%, 95%  $CI \pm 5.8$ ); the mother did not have enough milk (33.3%, 95%  $CI \pm 5.6$ ); the mother had to go to work or school (28.7%, 95%  $CI \pm 5.4$ ); and the baby didn't breastfeed very well (28.7%, 95%  $CI \pm 5.5$ ) (Figure 30, Table 16 in Appendix II).

FIGURE 30
Reasons for Stopping Breastfeeding (%)
2000 Michigan PRAMS



Among respondents who did not breastfeed their newborn at any time, 48 percent (48.1%, 95%  $CI \pm 5.9$ ) reported that they did not want to breastfeed, and 38 percent (38.7%, 95%  $CI \pm 5.9$ ) reported they had to go to work or school (Figure 31, Table 17 in Appendix II).

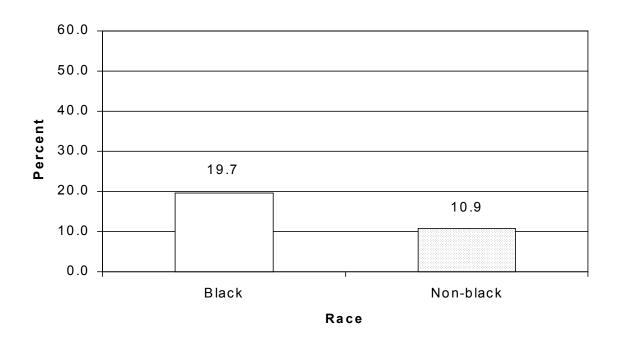
FIGURE 31
Reasons for Not Breastfeeding (%)
2000 Michigan PRAMS



#### **Infants in Intensive Care**

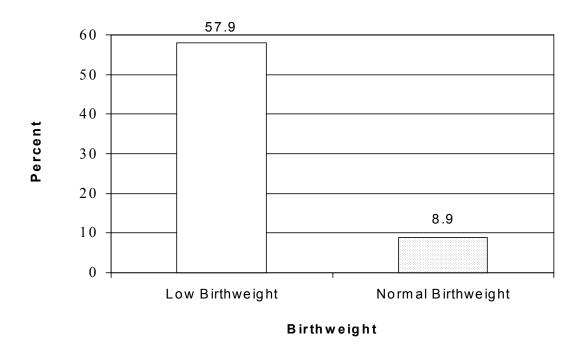
Twelve percent (12.3%, 95% CI  $\pm$ 1.9) of respondents indicated that their infant was placed in an intensive care unit following delivery. Infants born to black respondents (19.7%, 95% CI  $\pm$ 2.9) were more likely to be placed in an intensive care unit compared to infants born to non-black respondents (10.9%, 95% CI  $\pm$ 2.2) (Figure 32, Table 21 in Appendix II).

FIGURE 32
Percentage of Infants Placed in Intensive Care Unit Following Delivery
By Mother's Race
2000 Michigan PRAMS



Among normal birthweight infants, 8.9 percent (95% CI  $\pm$  2.1) were placed in an intensive care unit following delivery and 57.9 percent (95% CI  $\pm$  3.5) of low birthweight infants were placed in an intensive care unit following delivery (Figure 33, Table 21 in Appendix II).

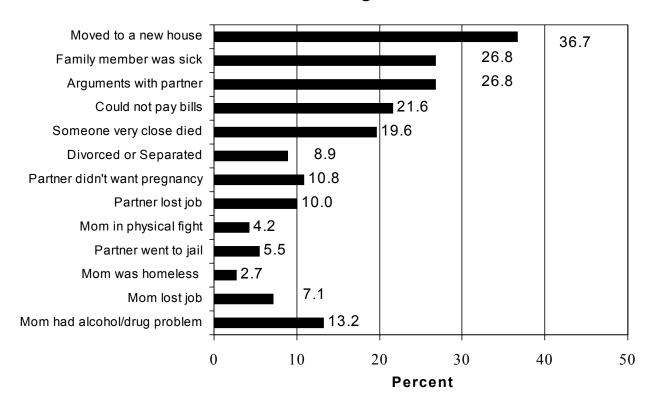
FIGURE 33
Percentage of Infants Placed in Intensive Care Unit Following Delivery
By Infant's Birthweight
2000 Michigan PRAMS



#### Stressors in the Year Prior to Delivery

Respondents were asked to select the stressors (from a list of 13) that they had experienced during the year prior to delivery. Nearly three-quarters of the respondents (74.1%, 95% CI  $\pm 3.0$ ) (See Table 22A in Appendix II) experienced at least one of the stressors listed, and 18.6 percent (95% CI  $\pm 2.5$ ) selected four or more stressors (See Table 22 in Appendix II). The stressors most commonly reported by respondents included moving to a new residence, having had a sick family member, and arguing with one's partner (Figure 34, Table 23 in Appendix II).

FIGURE 34
Types of Stressors Respondents Encountered
During the Year Prior to Delivery (%)
2000 Michigan PRAMS

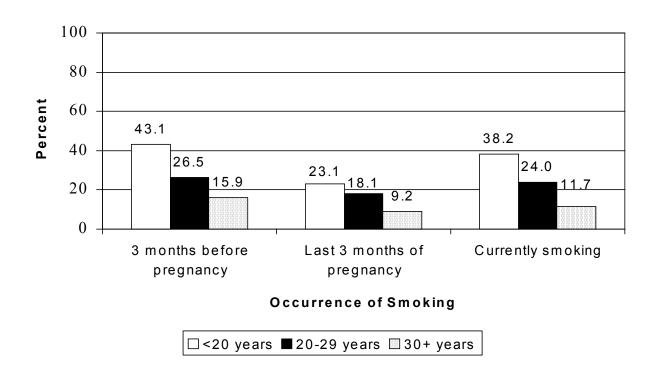


### **Cigarette Smoking**

Respondents were asked whether they smoked cigarettes during the three-month period before they became pregnant, during the last three months of pregnancy, and during the three-month period immediately following delivery. Overall, 24.7 percent (95% CI  $\pm 3.0$ ) of respondents smoked during the three-month period preceding pregnancy, 15.5 percent (95% CI  $\pm 2.5$ ) smoked during the last three months of pregnancy, and 21.3 percent (95% CI  $\pm 2.9$ ) smoked during the three month period following delivery (see Table 24 in Appendix II).

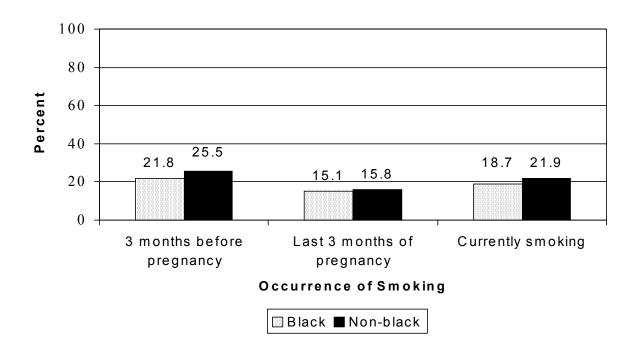
A smaller proportion of respondents aged 30 and older reported smoking at each of the three periods surrounding pregnancy compared with younger respondents (Figure 35, Table 24 in Appendix II).

FIGURE 35
Percentage of Mothers Who Smoked by Mother's Age:
Before, During and After Pregnancy
2000 Michigan PRAMS



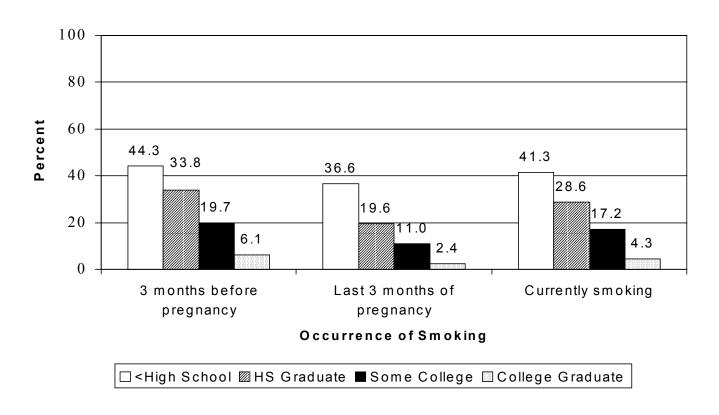
Black respondents were less likely to have reported smoking during any of the three periods surrounding pregnancy compared with non-black respondents (Figure 36, Table 24 in Appendix II).

FIGURE 36
Percentage of Mothers Who Smoked by Mother's Race:
Before, During and After Pregnancy
2000 Michigan PRAMS



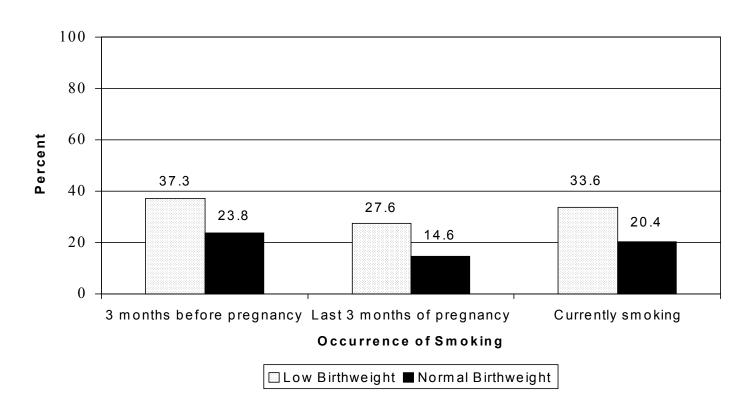
At each of the time periods surrounding pregnancy, education was negatively correlated with cigarette smoking (Figure 37, Table 24 in Appendix II).

FIGURE 37
Percentage of Mothers Who Smoked by Mother's Education Level:
Before, During and After Pregnancy
2000 Michigan PRAMS



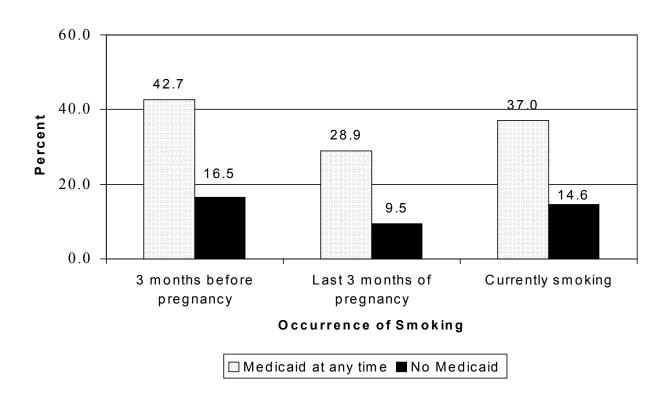
At each time period surrounding pregnancy, respondents with low birthweight infants were also more likely to have smoked compared with respondents with normal birthweight infants (Figure 38, Table 24 in Appendix II).

FIGURE 38
Percentage of Mothers Who Smoked by Infant's Birthweight:
Before, During and After Pregnancy
2000 Michigan PRAMS



A higher proportion of respondents with Medicaid coverage at any time (i.e., Medicaid before pregnancy, Medicaid paid for prenatal care, or Medicaid paid for delivery) reported smoking at each time point compared to respondents who were not receiving Medicaid coverage at any time (Figure 39, Table 24 in Appendix II).

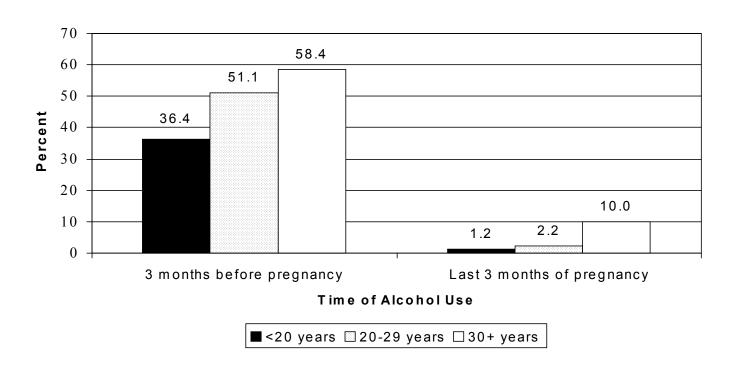
FIGURE 39
Percentage of Mothers Who Smoked by Medicaid Status:
Before, During and After Pregnancy
2000 Michigan PRAMS



#### **Alcohol Consumption**

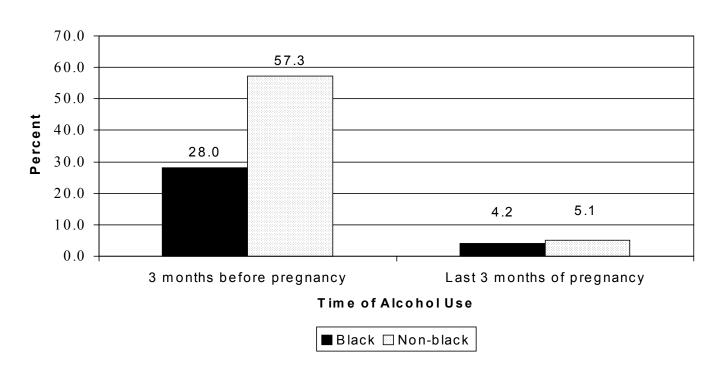
Respondents were asked whether or not they had consumed alcohol during the three-month period prior to becoming pregnant and during the last three months prior to delivery. Half of all respondents (52.0%, 95% CI  $\pm 3.4$ ) reported drinking alcohol during the three-month period preceding pregnancy, while 4.9 percent (95% CI  $\pm 1.5$ ) reported drinking alcohol during the last three months preceding delivery. These indicators were related to age. Women 30 and over were more likely to drink alcohol in the three months prior to pregnancy, and in the last 3 months of pregnancy compared to teenaged respondents (Figure 40, Table 25 in Appendix II).

FIGURE 40
Percentage of Mothers Who Consumed Alcohol by Mother's Age:
Before and During Pregnancy
2000 Michigan PRAMS



Non-black women were more than twice as likely to drink alcohol three months prior to pregnancy than were black respondents (Figure 41, Table 25 in Appendix II).

FIGURE 41
Percentage of Mothers Who Consumed Alcohol by Mother's Race:
Before and During Pregnancy
2000 Michigan PRAMS



#### APPENDIX I. METHODOLOGY

#### Survey Protocol, Sample, and Instrument

The data collection for the 2000 Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) was conducted by the Michigan Department of Community Health. Software designed under the supervision of the Centers for Disease Control and Prevention (C.D.C.) was used to manage the 2000 sample, enforce the protocols, and enter the data.

There are two main components to the data collection for Michigan PRAMS. In the mail and phone component, the data collection methods used are standardized protocols used by CDC. A stratified systematic sample of approximately 200 new mothers is selected monthly from a frame of eligible birth certificates. Each sampled mother is mailed a letter of explanation, a 12-page survey, and an incentive two to six months after the birth of her child. A reminder letter, a second, and a third package are sent to those who do not respond. In addition, telephone calls are made to mothers who do not respond to the survey.

In the hospital component of data collection, at least 400 black mothers are sampled from hospital delivery logs per year, over 26 time points. Interviews are attempted before the mother leaves the hospital following delivery. A second mailed questionnaire follows two to six months after the in-hospital interview, which focuses on post-partum experiences. In 2000, five urban hospitals in Michigan participated in the PRAMS project (Hurley Medical Center, Hutzel Hospital, Sinai Hospital, Grace Hospital, and Riverview Hospital). The CDC methodology for PRAMS used by other states does not include the hospital component. This component is important for Michigan, however, because it allows oversampling of black women who are difficult to access via mailed surveys.

A total of 2,589 women were selected by the sampling frame to be eligible to participate in the study, and 2,024 women actually participated in the study. The demographic characteristics of the sample in this survey are presented in Table 1 in Appendix II.

The 2000 survey instrument included questions developed for PRAMS by the Centers for Disease Control and Prevention, as well as state-added questions. The survey instrument included questions on previous pregnancy, intendedness of pregnancy, health insurance, prenatal care, satisfaction with prenatal care, alcohol and tobacco use, major life stressors during pregnancy, physical abuse, hospital stays (pre-delivery and delivery), breastfeeding, second-hand smoke contact for infant, sleep position of infant, routine well baby care, income sources, resources needed, and resources accessed. Topics of particular interest were selected from the survey to include in this report.

Unless otherwise noted, respondents who refused to answer or who answered that they did not know were not included in the calculation of percentages of the population considered to have a certain characteristic or behavior. Sample sizes for each estimate varied and are reflected in the 95 percent confidence interval limits presented with each estimate.

As with all survey estimates, these estimates are subject to sampling error. The confidence intervals presented are an attempt to quantify this sampling error and to clarify the degree of confidence in the estimates presented.

#### Weighting and Interpretation of the Results

The 2000 Michigan PRAMS data was weighted by the Food and Nutrition Database Research Center at Michigan State University. There were three weighting components, which adjusted for the sample design, nonresponse, and omissions from the sampling frame. For the nonresponse step, development of the weight involved identifying, within each stratum, factors that are associated with response. These factors were age, education, and marital status. The stratum in the survey were race (black and non-black) and birthweight (low and normal). The weighting procedure results in estimates that are reflective of the characteristics and behaviors of women in Michigan in 2000 who had a live birth.

In 2000 the total response rate statewide was 78.2 percent. The response rates for each of the four stratum were as follows:

Stratum	

LBW, black 73.1% LBW, non-black 76.5% NBW, black 81.3% NBW, non-black 82.6%

When the total response rate in any of the strata is less than 70 percent, the interpretation of the results for that stratum must be viewed with caution.

# APPENDIX II. TABLES OF RESULTS

**Table 1**Demographic characteristics of mothers 2000 Michigan PRAMS

2000	2000 Michigan PRAMS											
	Sample n	Estimated N	Percent (%)									
Total	2024	132,675	100									
Age												
19 years	306	16,387	12.4									
20-29 years	1,046	69,099	52.1									
30+ years	672	47,189	35.6									
_												
Race	4.0=0		4= 0									
Black	1,076	23,600	17.9									
Non-black	934	107,960	82.1									
Education												
<h.s. graduate<="" td=""><td>419</td><td>20,086</td><td>15.6</td></h.s.>	419	20,086	15.6									
H.S. Graduate	717	46,471	36.0									
Some College	452	30,929	24.0									
College Graduate	368	31,668	24.5									
College Graduate	300	31,000	24.5									
Marital Status												
Married	1,333	109,830	83.2									
Other	666	22,155	16.8									
Medicaid												
Medicaid at any time <sup>1</sup>	964	41,926	31.6									
Before pregnancy	459	15,868	12.1									
PNC payment	829	37,056	28.1									
Delivery payment	795	36,548	28.4									
No Medicaid at any time	1,011	88,694	66.9									

Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

**Table 2**Prevalence of low and normal birthweight by demographic characteristics 2000 Michigan PRAMS

		Low Birthwei	ght Infants	9	Normal Birthweight Infants				
		Estimated N	•	95% CI		Estimated N			
Total	963	9,312	7.0 ±	0.1	1,048	123,238	93.0 ±	0.1	
Age									
<19 years	158	1,513	9.3 ±	2.2	144	14,843	90.8 ±	2.2	
20-29 years	482	4,540	6.6 ±	0.6	560	64,548	93.4 ±	0.6	
30+ years	323	3,260	6.9 ±	8.0	344	43,846	93.1 ±	8.0	
Race									
Black	546	3,201	13.6 ±	0.5	523	20,378	86.4 ±	0.5	
Non-black	414	6,034	5.6 ±	0.1	518	101,871	94.4 ±	0.1	
Education									
<h.s. graduate<="" td=""><td>220</td><td>2,282</td><td>11.4 ±</td><td>2.2</td><td>198</td><td>17,801</td><td>88.6 ±</td><td>2.2</td></h.s.>	220	2,282	11.4 ±	2.2	198	17,801	88.6 ±	2.2	
H.S. Graduate	354	3,314	7.1 ±	0.9	361	43,152	92.9 ±	0.9	
Some College	199	1,661	5.4 ±	0.9	252	29,264	94.6 ±	0.9	
College Graduate	156	1,757	5.6 ±	1.0	208	29,874	94.5 ±	1.0	
Marital Status									
Married	616	6,570	6.0 ±	0.2	707	103,160	94.0 ±	1.8	
Other	337	2,657	12.0 ±	1.8	327	19,485	88.0 ±	0.2	

Table 3
Prevalence of pregnancies by intendedness of pregnancy
2000 Michigan PRAMS

2000 Milotingari 1 to time												
	Sample n	Estimated N	Percent(%)		95% CI							
Total	1,996	131,339	100.0									
Intendedness of pregnancy												
Wanted to become pregnant sooner	235	18,340	14.0	±	2.5							
Wanted to become pregnant later	733	39,793	30.3	±	3.1							
Became pregnant when wanted	724	58,919	44.9	±	3.4							
Did not want to become pregnant	304	14,287	10.9	±	2.0							

**Table 4**Prevalence of intended and unintended pregnancies by demographic characteristics 2000 Michigan PRAMS

Intended Unintended												
		Intende						011				
		Estimated N										
Total	898	75,935	59.8 ±	3.4	909	51,015	40.2	±	3.4			
Age												
≤19 years	51	4,482	29.3 ±	9.4	219	10,830	70.7	±	9.4			
20-29 years	445	37,884	57.8 ±	4.8	479	27,679	42.2	±	4.8			
30+ years	402	33,569	72.9 ±	5.1	211	12,505	27.1	±	5.1			
Race												
Black	317	7,004	36.0 ±	4.0	576	12,446	64.0	±	4.0			
Non-black	577	68,366	64.2 ±	4.0	326	38,069	35.8	±	4.0			
Education												
<h.s. graduate<="" td=""><td>106</td><td>7,721</td><td>43.4 ±</td><td>9.1</td><td>234</td><td>10,085</td><td>56.6</td><td>±</td><td>9.1</td></h.s.>	106	7,721	43.4 ±	9.1	234	10,085	56.6	±	9.1			
H.S. Graduate	282	22,730	50.8 ±	6.2	364	22,013	49.2	±	6.2			
Some College	219	18,680	62.7 ±		192	11,112	37.3		6.7			
College Graduate	270	25,284	81.0 ±	5.4	81	5,917	19.0	±	5.4			
Marital Status												
Married	765	71,693	66.6 ±	3.7	500	35,941	33.4	±	5.8			
Other	129	4,131	21.8 ±		398	14,802	78.2		3.7			
Infant's Birthweight												
Low	393	4,233	50.9 ±	3.6	452	4,090	49.1	±	3.6			
Normal	499	71,660	60.4 ±		454	46,897	39.6	±	3.6			
Medicaid												
Medicaid at any time1	256	13,726	36.3 ±	5.8	554	24,089	63.7	±	5.8			
Before pregnancy	112	4,812	36.2 ±		254	8,465		±	8.9			
No Medicaid at any time		61,732	70.1 ±		345	26,289	29.9	±	3.9			

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

Table 5
Prevalence of birth control use among women not intending pregnancy 2000 Michigan PRAMS

	Birth Control Use (Not Intending)										
	Sample n	Estimated N	Percent(%)	95% CI							
Total	429	26178	54.5 ±	5.5							
Age											
19 years	104	5,910	57.6 ±	11.8							
20-29 years	231	13,478	50.9 ±	7.4							
30+ years	94	6,790	60.1 ±	11.0							
Race											
Black	259	5,906	51.2 ±	5.4							
Non-black	166	20,068	55.7 ±	7.1							
Education											
<h.s. graduate<="" td=""><td>107</td><td>4,742</td><td>48.9 ±</td><td>11.7</td></h.s.>	107	4,742	48.9 ±	11.7							
H.S. Graduate	161	10,271	49.7 ±	8.8							
Some College	104	6,908	65.3 ±	10.8							
College Graduate	41	3,303	62.4 ±	16.1							
Marital Status											
Married	242	19,126	56.7 ±	8.9							
Other	183	6,955	49.5 ±	6.9							
Infant's Birthweight											
Low	200	1,858	49.2 ±	5.3							
Normal	228	24,308	54.9 ±	6.0							
Medicaid											
Medicaid at any time1	255	11,291	49.5 ±	7.6							
Before pregnancy	107	4,073	50.2 ±	11.5							
No Medicaid at any time	168	14,497	58.9 ±	7.9							

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

Table 5A
Use of birth control at the time pregnancy occurred among women not trying to become pregnant 2000 Michigan PRAMS

2000 Milonigan i 10 avio											
	Birth Control Use (Not Intending)										
_ <u></u>	Sample n	Estimated N	Percent (%)	95% CI							
Birth control use											
Yes	569	33,108	48.8 ±	4.6							
No	708	34,756	51.2 ±	4.6							

**Table 6**Prenatal care started by demographic characteristics 2000 Michigan PRAMS

	First Trimester					Second Trimester				
	Sample n	Estimated N	Percent	(%)	95% CI	Sample n	Estimated N	Percen	t(%)	95% CI
Total	1,474	107,294	85.3	±	2.4	294	14,890	11.8	±	2.2
Age										
19 years	166	9,676	62.8	±	9.4	89	5,280	34.3	±	9.4
20-29 years	759	56,596	86.6	±	3.1	148	6,621	10.1	±	2.7
30+ years	549	41,021	91.1	±	3.2	57	2,988	6.6	±	2.8
Race										
Black	684	15,475	72.3	±	3.6	209	4,600	21.5	±	3.3
Non-black	781	91,037	87.9	±	2.8	85	10,290	9.9	±	2.5
Education										
<h.s. graduate<="" td=""><td>245</td><td>12,597</td><td>66.0</td><td>±</td><td>8.1</td><td>104</td><td>5,191</td><td>27.2</td><td>±</td><td>7.7</td></h.s.>	245	12,597	66.0	±	8.1	104	5,191	27.2	±	7.7
H.S. Graduate	519	37,406	83.5	±	4.2	115	6,094	13.6	±	3.9
Some College	349	26,773	91.3	±	3.8	48	1,967	6.7	±	3.2
College Graduate	321	28,033	93.9	±	3.3	21	1,535	5.1	±	3.1
Marital Status										
Married	1,064	93,166	89.4	±	2.4	131	8,826	8.5	±	6.4
Other	392	13,590	65.0	±	6.6	160	6,042	28.9	±	2.2
Infant's Birthweig	ht									
Low	672	6,893	80.3	±	2.7	148	1,284	15.0	±	2.4
Normal	795	100,336	85.7	±	2.5	146	13,606	11.6	±	2.3
Medicaid Paid PN	С									
Yes	532	25,061	71.7	±	5.4	198	8,477	24.3	±	5.2
No	933	•		±	2.4	90	6,337	7.1	±	2.2

**Table 6, cont.**Prenatal care started by demographic characteristics 2000 Michigan PRAMS

		Third Tri			Jan PRAN	No Prenatal Care					
	Sample n E	stimated N	Percent	(%)	95% CI	Sample n Es	timated N	Percent(%) 9	95% CI		
Total	52	1,991	1.6	±	0.7	38	1,589	1.3 ±	0.8		
Age											
<19 years	13	328	2.1		1.6	12	113		0.6		
20-29 years	31	963	1.5		8.0	15	1,169		1.4		
30+ years	8	700	1.6	±	1.5	11	307	0.7 ±	0.8		
Race											
Black	42	1,087	5.1	±	1.8	24	247	1.2 ±	0.6		
Non-black	10	904	0.9	±	8.0	12	1,318	1.3 ±	0.9		
Education											
<h.s. graduate<="" td=""><td>20</td><td>758</td><td>4.0</td><td>±</td><td>2.6</td><td>13</td><td>540</td><td>2.8 ±</td><td>3.1</td></h.s.>	20	758	4.0	±	2.6	13	540	2.8 ±	3.1		
H.S. Graduate	23	735	1.6	±	1.1	14	587	1.3 ±	1.4		
Some College	4	373	1.3	±	1.7	5	222	0.8 ±	1.2		
College Graduate	2	79	0.3	±	0.4	2	194	0.7 ±	1.2		
Marital Status											
Married	14	1,027	1.0	±	0.8	17	1,159	1.1 ±	2.1		
Other	34	834	4.0	±	1.6	21	430	2.1 ±	0.9		
Infant's Birthweig	ht										
Low	22	186	2.2	±	1.0	25	218	2.5 ±	1.0		
Normal	28	1,777	1.5	±	0.7	9	1,340	1.1 ±	8.0		
Medicaid Paid PN	С										
Yes	29	906	2.6	±	1.5	9	490	1.4 ±	1.7		
No	18	984	1.1	±	0.8	16	971	1.1 ±	0.9		

**Table 6A**Trimester when prenatal care started by source of PNC payments 2000 Michigan PRAMS

2000 Michigan 1 10 Mic												
		Medi	caid			Insur	ance					
	Sample n	Estimated N	Percent(%)		95% CI	Sample n	Estimated N	Percent(%)		95% CI		
1st trimester	532	25,061	71.7	±	5.4	910	79,136	90.8	±	2.5		
2nd trimester	198	8,477	24.3	±	5.2	88	6,166	7.1	±	2.2		
3rd trimester	29	906	2.6	±	1.5	19	960	1.1	±	8.0		
no care	9	490	1.4	±	1.7	14	943	1.1	±	0.9		

 Table 7

 Prevalence of starting prenatal care as early as mothers desired by demographic characteristics

 2000 Michigan PRAMS

_	Prenata	al Care as Earl	y as Mother	Des	ired	No Early Prenatal Care as Mother Desired				
	Sample n	Estimated N	Percent(%	6)	95% CI	Sample n E	Estimated N	Percent(%	6)	95% CI
Total	1,547	107,688	81.8	±	2.6	445	23,448	17.8	±	2.5
Age										
19 years	183	9,583	59.3	±	9.3	115	6,481	40.1	±	9.3
20-29 years	792	55,978	81.9	±	3.5	234	11,944	17.5	±	3.5
30+ years	572	42,127	89.4	±	3.4	96	5,023	10.7	±	3.4
Race										
Black	769	17,183	73.4	±	3.4	285	5,966	25.5	±	3.3
Non-black	767	89,441	83.5	±	3.1	157	17,432	16.3	±	3.1
Education										
<h.s. graduate<="" td=""><td>263</td><td>13,024</td><td>65.1</td><td>±</td><td>7.9</td><td>144</td><td>6,636</td><td>33.2</td><td>±</td><td>7.8</td></h.s.>	263	13,024	65.1	±	7.9	144	6,636	33.2	±	7.8
H.S. Graduate	540	37,160	81.0	±	4.6	165	8,672	18.9	±	4.6
Some College	367	26,576	86.5	±	4.5	80	4,070	13.3	±	4.5
College Graduate	326	28,268	89.8	±	4.2	40	3,216	10.2	±	4.2
Marital Status										
Married	1,082	92,620	85.0	±	2.7	235	15,914	14.6	±	6.5
Other	446	14,552	66.0	±	6.5	204	7,361	33.4	±	2.7
Infant's Birthweigh	t									
Low	708	6,977	75.7	±	2.9	238	2,175	23.6	±	2.9
Normal	828	100,611	82.3	±	2.8	205	21,249	17.4	±	2.7
Medicaid Paid PNC	;									
Yes	577	26,101	70.6	±	5.4	245	10,761	29.1	±	5.4
No	968	81,536	86.7	±	2.8	178	12,462	13.3	±	2.8

**Table 7 cont.**Prevalence of starting prenatal care as early as mothers desired by demographic characteristics 2000 Michigan PRAMS

	2000 Michig		Prenatal Care		
	Sample n	Estimated N	Percent(%)		95% CI
Total	17	508	0.4	±	0.4
Age					
19 years	6	86	0.5	±	0.6
20-29 years	11	422	0.6	±	0.7
30+ years	0	0	0.0	±	0.0
Race					
Black	15	277	1.2	±	8.0
Non-black	2	231	0.2	±	0.4
Education					
<h.s. graduate<="" td=""><td>9</td><td>361</td><td>1.8</td><td>±</td><td>2.2</td></h.s.>	9	361	1.8	±	2.2
H.S. Graduate	5	71	0.2	±	0.2
Some College	2	69	0.2	±	0.3
College Graduate	0	0	0.0	±	0.0
Marital Status					
Married	6	380	0.4	±	0.4
Other	11	127	0.6	±	0.4
Infant's Birthweight					
Low	10	69	0.8	±	0.5
Normal	7	438	0.4	±	0.4
Medicaid Paid PNC					
Yes	4	111	0.3	±	0.3
No	1	14	0.0	±	0.0

Table 8
Reasons for not getting prenatal care as early as mothers desired 2000 Michigan PRAMS

	Sample n	Estimated N	Percent(%)	95% CI
Reason for No Prenatal Care				
Could Not Get Earlier Appointment	119	7,387	30.3 ±	7.3
Didn't Know I Was Pregnant	188	10,430	42.7 ±	7.7
Lack of Money	94	4,879	20.0 ±	6.3
Too Many Other Things Going On	49	1,319	5.4 ±	2.8
The Doctor Did Not Start Care Earlier	28	2,437	10.0 ±	4.9
No Transportation	44	1,643	6.7 ±	3.6
Couldn't Get Childcare for Other Children	17	697	2.9 ±	2.5
Considered Terminating Pregnancy	62	1,831	7.5 ±	3.4
No Medicaid Card	41	2,466	10.1 ±	4.9
Other	55	2,732	11.2 ±	4.6

**Table 9**Source of payment for prenatal care 2000 Michigan PRAMS

	Sample n	Estimated N	Percent(%)	95% CI
Source of Payment	•		, ,	
Private Health Insurance	1,126	91,643	69.6 ±	3.0
Medicaid	829	37,056	28.1 ±	2.9
Personal Income	164	14,631	11.1 ±	2.2
Other	77	4,999	3.8 ±	1.3

Table 10

Prevalence of mothers with health insurance or Medicaid as source of prenatal care payment by demographic characteristics 2000 Michigan PRAMS

	Private Health Insurance for PNC				Medicaid Coverage for PNC				
	Sample n	Estimated N	Percent(%)	95% CI	Sample n	Estimated N	Percent(%)	95% CI	
Total	1,126	91,643	69.6 ±	3.0	829	37,056	28.1 ±	2.9	
_									
Age									
19 years	97	6,151	38.3 ±	9.4	199	10,099	62.9 ±	9.4	
20-29 years	535	44,969	65.6 ±	4.4	484	21,506	31.4 ±	4.2	
30+ years	494	40,523	86.0 ±	3.6	146	5,450	11.6 ±	3.2	
Race									
Black	437	9,538	41.2 ±	3.7	595	13,252	57.3 ±	3.8	
Non-black	681	81,335	75.7 ±	3.5	229	23,485	21.9 ±	3.4	
Education									
<h.s. graduate<="" td=""><td>101</td><td>7,093</td><td>36.2 ±</td><td>8.4</td><td>295</td><td>12,189</td><td>62.2 ±</td><td>8.4</td></h.s.>	101	7,093	36.2 ±	8.4	295	12,189	62.2 ±	8.4	
H.S. Graduate	323		57.8 ±		358		37.9 ±		
Some College	321	25,281	81.9 ±		132	•	18.2 ±		
College Gradua			95.4 ±	_	25		3.8 ±	_	
Marital Status									
Married	966	85,589	78.4 ±	3.2	341	21,020	19.3 ±	3.0	
						•			
Other	152	5,834	26.7 ±	6.1	470	15,549	71.1 ±	6.1	
Infant's Birthw	eight								
Low	493	5,152	56.8 ±	3.3	431	3,830	42.3 ±	3.3	
Normal	624	86,404	70.5 ±	3.2	394	33,187	27.1 ±	3.1	

**Table 11**Prevalence of infant's birthweight by source of prenatal care payment 2000 Michigan PRAMS

	2000 Michigan PRAMS						
	Sample n	Estimated N	Percent(%)	95% CI			
Source of Payment							
Medicaid							
Total	825	37,018	100.0				
Low Birthweight	431	3,830	10.4 ±	1.3			
Normal Birthweight	394	33,187	89.7 ±	1.3			
Private Health Insurance							
Total	1,117	91,556	100.0				
Low Birthweight	493	5,152	5.6 ±	0.4			
Normal Birthweight	624	86,404	94.4 ±	0.4			
Personal Income							
Total	163	14,627	100.0				
Low Birthweight	70	723	4.9 ±	1.5			
Normal Birthweight	93	13,905	95.1 ±	1.5			
Other							
Total	77	4,999	100.0				
Low Birthweight	34	332	6.6 ±	3.2			
Normal Birthweight	43	4,667	93.4 ±	3.2			

Table 12
Place where prenatal care was received by demographic characteristics 2000 Michigan PRAMS

		Hospital	/Clinic	Health Department				
	Sample n	Estimated N	Percent(%)	95% CI	Sample n Es	timated N	Percent(%) 9	95% CI
Total	524	22,150	17.0 ±	2.3	94	3,553	2.7 ±	1.0
Age								
<19 years	106	4,435	27.7 ±	8.0	37	1,091	6.8 ±	4.1
20-29 years	301	12,717	18.8 ±	3.4	43	1,835	$2.7 \pm$	1.4
30+ years	117	4,998	10.7 ±	3.1	14	626	1.3 ±	1.3
Race								
Black	408	9,422	41.0 ±	3.8	77	1,514	6.6 ±	1.9
Non-black	113	12,678	12.0 ±	2.7	17	2,039	1.9 ±	1.2
Infant's Birthy	veight							
Low	248	2,045	22.9 ±	2.7	57	416	4.7 ±	1.2
Normal	272	20,077	16.6 ±	2.5	37	3,137	2.6 ±	1.1

	Doct	or's Office,	HMO, PPO	Other				
	Sample n Es	timated N F	Percent(%) 9	5% CI	Sample n Est	imated N I	Percent(%)	95% CI
Total	1,238	98,288	75.5 ±	2.7	105	6,127	4.7 ±	1.5
Age								
<19 years	127	9,018	56.4 ±	9.3	21	1,456	9.1 ±	5.8
20-29 years	616	49,219	72.9 ±	4.0	57	3,714	5.5 ±	2.3
30+ years	495	40,051	85.9 ±	3.6	27	956	2.1 ±	1.5
Race								
Black	492	11,024	47.9 ±	3.8	56	1,037	4.5 ±	1.5
Non-black	736	86,226	81.3 ±	3.2	49	5,089	4.8 ±	1.8
Infant's Birthw	reight							
Low	555	5,910	66.2 ±	3.1	60	560	$6.3 \pm$	1.7
Normal	674	92,283	76.2 ±	2.9	45	5,566	4.6 ±	1.6

Table 13
Topics addressed by health care professional during prenatal care 2000 Michigan PRAMS

	Sample n	Estimated N	Percent(%)	95% CI
Medication Use	1,729	115,603	88.4 ±	2.2
Early Labor	1,602	110,321	84.7 ±	2.5
Testing for HIV	1,727	112,390	86.8 ±	2.4
Alcohol use	1,498	90,966	69.9 ±	3.2
Smoking	1,514	91,894	70.7 ±	3.2
Breastfeeding	1,585	103,804	79.6 ±	2.8
Birth Control	1,566	102,989	79.2 ±	2.8
Illegal Drugs	1,377	79,123	60.9 ±	3.4
Seatbelt Use	1,008	60,488	46.7 ±	3.4
Physical Abuse	800	40,580	31.4 ±	3.1
Screening for Birth Defects	1,620	108,386	83.3 ±	2.5

Table 14Topics addressed by health care professional during prenatal care by Medicaid-paid-for PNC2000 Michigan PRAMS

	Medicaid Paid				No Medicaid			
	Sample n	Estimated N	Percent(%)	95% CI	Sample n E	stimated N	Percent(%)	95% CI
Medication Use	711	31,734	85.7 ±	4.1	1,018	83,869	89.5 ±	2.5
Early Labor	681	30,592	83.2 ±	4.5	921	79,729	85.3 ±	2.9
Testing for HIV	754	33,081	90.3 ±	3.7	973	79,309	85.4 ±	3.0
Alcohol Use	686	28,091	76.3 ±	5.3	812	62,875	67.4 ±	3.9
Smoking	693	29,663	80.7 ±	4.8	821	62,230	66.7 ±	4.0
Breastfeeding	683	30,063	81.7 ±	4.7	902	73,741	78.7 ±	3.4
Birth Control	714	33,011	89.6 ±	3.3	852	69,978	75.0 ±	3.6
Illegal Drugs	665	26,572	72.3 ±	5.6	712	52,550	56.4 ±	4.2
Seatbelt Use	435	17,000	46.6 ±	5.9	573	43,488	46.7 ±	4.2
Physical Abuse	449	17,155	47.1 ±	5.9	351	23,425	25.3 ±	3.6
Screening for Birth Defects	663	29,316	80.2 ±	4.7	957	79,071	84.6 ±	3.0

Table 15
Prevalence of ever breastfed by demographic characteristics 2000 Michigan PRAMS

		Ever Brea	st Fed	
	Sample n	Estimated N	Percent(%)	95% CI
Total	1,046	85,149	67.2 ±	3.2
Age				
≤19 years	102	7,154	47.6 ±	10.1
20-29 years	511	42,116	64.1 ±	4.6
30+ years	433	35,878	78.2 ±	4.7
Race				
Black	417	9,610	49.2 ±	4.1
Non-black	622	74,794	70.5 ±	3.8
Education				
<h.s. graduate<="" td=""><td>123</td><td>7,378</td><td>40.9 ±</td><td>8.9</td></h.s.>	123	7,378	40.9 ±	8.9
H.S. Graduate	323	27,583	62.1 ±	5.9
Some College	269	20,823	70.1 ±	6.4
College Graduate	296	26,986	86.1 ±	4.9
Marital Status				
Married	847	77,685	72.1 ±	3.5
Other	193	7,280	39.2 ±	7.3
Infant's Birthweight				
Low	447	4,699	57.6 ±	3.5
Normal	591	80,366	67.9 ±	3.4
Medicaid				
Medicaid at any time1	351	19,717	51.9 ±	5.9
Before pregnancy	140	6,733	49.8 ±	9.0
No Medicaid at any time	685	64,413	73.5 ±	3.9

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

**Table 16**Reasons for stopping breastfeeding 2000 Michigan PRAMS

2000 Michigan FRAMS					
	Sample n	Estimated N	Percent(%)	95% CI	
Reason for Stopping Breastfeeding					
Go to Work or School	168	12,829	28.7 ±	5.4	
Baby Didn't BF Very Well	161	12,724	28.7 ±	5.5	
Not Enough Milk	226	14,859	33.3 ±	5.6	
Felt It was Time to Stop	111	8,291	18.6 ±	4.5	
Baby Not Gaining Enough Weight	50	2,724	6.1 ±	2.7	
Baby Was Sick	20	982	2.2 ±	1.5	
Sore/cracked/bleeding Nipples	116	9,307	20.8 ±	4.9	
Baby Not Satisfied	187	16,719	37.4 ±	5.8	
Household Duties	93	4,546	10.2 ±	3.3	
Mother Was Sick	38	1,953	4.4 ±	2.3	
Mom's Partner Wanted to Stop	8	548	1.2 ±	1.3	
Needed Another Person to Feed	75	5,198	11.6 ±	3.8	
No Family/Friend Support	23	1,084	2.4 ±	1.6	
Provider Recommended	22	2,367	5.3 ±	2.8	
Mom Not Eating Well Enough	91	5,061	11.3 ±	3.6	
Other	194	12,526	28.0 ±	5.3	

Table 17
Reasons for not breastfeeding among mothers who never breastfed
2000 Michigan PRAMS

	Sample n	Estimated N	Percent(%)	95% CI
Reason for Not Breastfeeding				
Have other children totake care of	189	13,231	32.0 ±	5.7
Didn't Want To	366	19,934	48.1 ±	5.9
Go to Work or School	253	15,985	38.7 ±	5.9
Household Duties	114	6,401	15.5 ±	4.3
Didn't Want to Be Tied Down	82	6,419	15.5 ±	4.5
Embarassed	65	4,651	11.2 ±	3.9
Partner Didn't Want	30	1,634	4.0 ±	2.3
Wanted Figure Back	101	7,088	17.2 ±	4.6
No Family/Friend Support	19	948	2.3 ±	1.7
Didn't Think Had Enough Milk	69	3,810	9.2 ±	3.6
Mom Not Eating Well Enough	165	8,698	21.1 ±	4.9
Other	238	12,050	29.2 ±	5.4

Table 18
Prevalence of mothers receiving WIC during pregnancy by demographic characteristics
2000 Michigan PRAMS

	Mothers Receiving WIC During Pregnancy						
	Sample n	Estimated N	Percent(%)		95% CI		
Total	953	48,331	36.7	±	3.2		
Age							
19 years	224	12,014	73.3	±	8.3		
20-29 years	551	29,204	42.8	±	4.7		
30+ years	178	7,113	15.1	±	3.7		
Race							
Black	625	13,859	59.0	±	3.7		
Non-black	320	34,204	31.9	±	3.9		
Education							
<h.s. graduate<="" td=""><td>287</td><td>14,883</td><td>74.3</td><td>±</td><td>6.9</td></h.s.>	287	14,883	74.3	±	6.9		
H.S. Graduate	411	23,077	50.2	±	6.0		
Some College	186	7,932	25.8	±	5.6		
College Graduate	37	1,703	5.4	±	2.8		
Marital Status							
Married	493	32,222	29.6	±	3.5		
Other	446	15,672	70.8	±	5.7		
Infant's Birthweight							
Low	492	4,554	49.1	±	3.4		
Normal	456	43,724	35.7	±	3.4		

Table 19
Prevalence of mothers and babies receiving WIC during the early postpartum period by mother's demographic characteristics
2000 Michigan PRAMS

		<b>Mother Rece</b>	iving WIC			Baby Rece	iving WIC	
	Sample n	Estimated N	Percent(%)	95% CI	Sample r E	stimated N	Percent(%)	95% CI
Total	36	963	0.8 ±	0.5	341	17,629	13.8 ±	2.3
Age								
19 years	10	366	2.4 ±	2.8	71	3,250	21.0 ±	7.7
20-29 years	20	489	$0.7 \pm$	0.7	205	11,271	17.1 ±	3.6
30+ years	6	109	0.2 ±	0.2	65	3,109	6.7 ±	2.8
Race								
Black	27	421	2.1 ±	1.1	217	4,548	22.9 ±	3.4
Non-black	9	542	0.5 ±	0.6	122	12,928	12.1 ±	2.7
Education								
<h.s. graduate<="" td=""><td>15</td><td>402</td><td>2.2 ±</td><td>2.4</td><td>89</td><td>3,680</td><td>20.2 ±</td><td>7.0</td></h.s.>	15	402	2.2 ±	2.4	89	3,680	20.2 ±	7.0
H.S. Graduate	14	442	1.0 ±	1.0	160	9,924	22.1 ±	5.0
Some College	4	87	0.3 ±	0.4	65	3,213	10.7 ±	4.0
College Graduate	2	27	0.1 ±	0.1	12	406	1.3 ±	1.3
Marital Status								
Married	14	649	0.6 ±	0.6	192	12,487	11.5 ±	2.5
Other	22	315	1.6 ±	1.0	145	5,090	26.4 ±	6.5
Infant's Birthweig	ıht							
Low	, 26	218	2.5 ±	1.0	182	1,674	19.0 ±	2.7
Normal	10	745	0.6 ±	0.5	157	15,940	13.4 ±	2.5

Table 19, cont.

Prevalence of mothers and babies receiving WIC during the early postpartum period by mother's demographic characteristics

2000 Michigan PRAMS

Neither Receiving WIC **Mother and Baby Receiving WIC** Sample n Estimated N Percent(%) Sample r Estimated N Percent(%) 95% CI 95% CI Total 669 33,214 26.0 ± 3.0 823 76,133 59.5 ± 3.3 Age <19 years 164 9,630 62.1 ± 9.5 32 2,252 14.5 ± 7.2 20-29 years 372 28.8 ± 4.3 35,319 53.4 ± 4.8 19,034 362 30+ years 133 4,550  $9.8 \pm$ 2.8 429 38,562 83.2 ± 3.9 Race Black 437 9,515 47.9 ± 4.1 249 3.6 5,372 27.1 ± Non-black 229 23,519 22.0 ± 567 70,003 65.4 ± 3.9 3.4 **Education** <H.S. Graduate 191 11,126 61.2 ± 8.6 56 2,981 16.4 ± 6.6 201 291  $34.0 \pm$ 43.0 ± H.S. Graduate 15,286 5.7 19,332 6.1 Some College 141 5,534  $18.3 \pm$ 220 21,349  $70.7 \pm$ 5.9 4.8 College Graduate 29 1,063  $3.4 \pm$ 2.1 314 29,600 95.2 ± 2.4 **Marital Status** Married 365 22,487  $20.8 \pm$ 3.1 731 72,617 67.1 ± 3.6 Other 294 10,393 53.8 ± 7.4 91 3,509 18.2 ± 5.8 Infant's Birthweight Low 355 3,276  $37.2 \pm$ 3.4 335 3,648 41.4 ± 3.4 Normal 311 29,922 72,417 60.8 ± 25.1 ± 3.2 482 3.6

**Table 20**Prevalence of infant's hospital stay following delivery by source of prenatal care payments 2000 Michigan PRAMS

		Private Ins	urance			Medicaid			
	Sample n	Estimated N	Percent(	%)95% CI	Sample n	Estimated N	Percent(%)	95% CI	
Total	1,087	90,468	100.0		713	33,789	100.0		
Infant-nights in	n Hospital								
Did Not Stay	28	1,649	1.8	± 1.1	42	1,817	5.4 ±	2.6	
1 night	168	19,808	21.9	± 3.6	89	7,448	22.0 ±	5.4	
2 nights	393	48,266	53.4	± 4.2	223	15,423	45.7 ±	6.2	
3 nights	146	12,987	14.4	± 2.9	109	4,646	13.8 ±	4.0	
4+ nights	351	7,721	8.5	± 1.8	248	4,445	13.2 ±	3.1	
Did Not Go	1	37	0.0	± 0.1	2	10	$0.0 \pm$	0.0	

		Personal I	ncome			Other			
	Sample n	Estimated N	Percent(	%)	95% CI	Sample n	Estimated N	Percent(%)	95% CI
Total	161	14,541	100.0			71	4,814	100.0	
Infant-nights in	n Hospital								
Did Not Stay	0	0	0.0	±	0.0	8	479	10.0 ±	10.3
1 night	25	3,015	20.7	±	8.8	9	1,349	28.0 ±	17.3
2 nights	62	8,106	55.7	±	10.7	19	1,610	33.4 ±	17.1
3 nights	20	2,060	14.2	±	7.4	13	1,015	21.1 ±	14.7
4+ nights	53	1,144	7.9	±	4.6	22	362	7.5 ±	4.4
Did Not Go	1	217	1.5	±	2.9	0	0	0.0 ±	0.0

Table 21
Prevalence of infants placed in intensive care units by mother's demographic characteristics 2000 Michigan PRAMS

	2000 Wilding		aced In ICU	
	Sample n	Estimated N	Percent(%)	95% CI
Total	614	15,601	12.3 ±	1.9
Age				
<19 years	98	2,260	15.3 ±	6.0
20-29 years	314		11.7 ±	
30+ years	202	•	12.1 ±	3.3
Race				
Black	328	3,916	19.7 ±	2.9
Non-black	284	11,518	10.9 ±	2.2
Education				
<h.s. graduate<="" td=""><td>123</td><td>2,848</td><td>16.3 ±</td><td>5.6</td></h.s.>	123	2,848	16.3 ±	5.6
H.S. Graduate	203	4,262	9.6 ±	2.8
Some College	138	3,379	11.3 ±	3.8
College Graduate	125	4,266	13.5 ±	4.3
Marital Status				
Married	419	12,093	11.2 ±	2.1
Other	190	3,426	18.2 ±	5.0
Infant's Birthweight				
Low	506	5,085	57.9 ±	3.5
Normal	103	10,475	8.9 ±	2.1
Medicaid				
Medicaid at any time1	291	5,960	15.7 ±	3.6
No Medicaid at any time	312	9,332	10.6 ±	2.3

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

Table 22

Number of stressors mothers encountered during the year preceding delivery 2000 Michigan PRAMS

	2000 1111011119	,		
	Sample n	Estimated N	Percent(%)	95% CI
Number of Stressors				
None	421	34,045	25.9 ±	3.0
1 Stressor	443	34,136	26.0 ±	3.0
2 Stressor	372	25,982	19.8 ±	2.7
3 Stressor	249	12,858	9.8 ±	1.9
4+ Stressor	523	24,396	18.6 ±	2.5

**Table 22A**Number of stressors mothers encountered during the year preceding delivery 2000 Michigan PRAMS

	Sample n	Estimated N	Percent(%)	95% CI						
Number of Stressors										
None	421	34,045	25.9 ±	3.0						
1+ Stressor	1,587	97,372	74.1 ±	3.0						

Table 23

Type of stressors mothers encountered during the year preceding delivery 2000 Michigan PRAMS

2000 IV	IICHIYAH FINAMO	,		
	Sample n	Estimated N	Percent(%)	95% CI
Type of Stressors				
Moved to New Home	734	48,320	36.7 ±	3.3
Family Member Was Sick	614	35,185	26.8 ±	3.0
Arguments With Partner	691	35,041	26.8 ±	2.9
Could Not Pay Bills	524	28,316	21.6 ±	2.8
Someone Very Close Died	510	25,624	19.6 ±	2.6
Divorced or Separated	286	11,647	8.9 ±	1.7
Partner Didn't Want Pregnancy	221	14,140	10.8 ±	2.1
Partner Lost Job	270	13,125	10.0 ±	2.0
Mother in Physical Fight	131	5,530	4.2 ±	1.3
Partner/Mother went to Jail	141	7,152	5.5 ±	1.5
Mother Was Homeless	81	3,534	2.7 ±	1.0
Mother Lost Job	272	9,282	7.1 ±	1.5
Mother Had Alcohol/Drug Problem	322	17,252	13.2 ±	2.3

**Table 24**Prevalence of smoking by demographic characteristics 2000 MI PRAMS

	3 Mo	nths Before	Pregnancy		Last	Last 3 Months of Pregnancy			
	Sample r Es	stimated N F	Percent(%) 9	5% CI	Sample r E	stimated N F	ercent	(%)	95% CI
Total									
No Smoking	1,436	97,987	75.3 ±	3.0	1,614	110,414	84.5		2.5
Smoking	544	32,198	24.7 ±	3.0	376	20,260	15.5	±	2.5
Age									
19 years	102	6,927	43.1 ±	9.6	58	3,755	23.1	±	8.3
20-29 years	282	17,784	$26.5 \pm$	4.3	194	12,150	18.1	±	3.8
30+ years	160	7,488	15.9 ±	4.0	124	4,355	9.2	±	3.0
Race									
Black	259	5,060	21.8 ±	3.5	185	3,495	15.1	±	2.7
Non-black	280	26,948	25.5 ±	3.6	190	16,752	15.8	±	3.0
Education									
<h.s. graduate<="" td=""><td>180</td><td>8,582</td><td>44.3 ±</td><td>8.4</td><td>151</td><td>7,133</td><td>36.6</td><td>±</td><td>8.1</td></h.s.>	180	8,582	44.3 ±	8.4	151	7,133	36.6	±	8.1
H.S. Graduate	231	15,341	$33.8 \pm$	5.8	158	8,901	19.6	±	4.8
Some College	91	5,996	19.7 ±	5.5	47	3,388	11.0	±	4.4
College Graduate	24	1,909	6.1 ±	3.3	13	747	2.4	±	2.0
Marital Status									
Married	306	23,658	21.8 ±	3.3	192	13,612	12.6	±	2.6
Other	229	8,387	39.6 ±	6.8	179	6,587	30.4	±	6.5
Infant's Birthweight									
Low	315	3,365	$37.3 \pm$	3.4	234	2,521	27.6	±	3.1
Normal	222	28,750	23.8 ±	3.2	141	17,727	14.6	±	2.7
Medicaid									
Medicaid at any time1	348	17,334	42.7 ±	5.6	254	11,729	28.9	±	5.3
Before pregnancy	154	5,597	$35.7 \pm$	8.0	117	4,111	26.3	±	7.4
No Medicaid at any time	183	14,493	16.5 ±	3.3	111	8,369	9.5	±	2.6

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

**Table 24, cont.**Prevalence of smoking by demographic characteristics 2000 Michigan PRAMS

		Currently S	moking	
	Sample n	Estimated N	Percent(%)	95% CI
Total				
No Smoking	1,470	101,868	78.7 ±	2.9
Smoking	465	27,598	21.3 ±	2.9
Age				
≤19 years	88	6,122	38.2 ±	9.6
20-29 years	248	,		4.2
30+ years	129	5,460	11.7 ±	3.5
Race				
Black	212	•		3.0
Non-black	251	23,340	21.9 ±	3.4
Education				
<h.s. graduate<="" td=""><td>147</td><td>,</td><td></td><td>8.6</td></h.s.>	147	,		8.6
H.S. Graduate	205	,		5.5
Some College	82	,		5.2
College Graduate	20	1,353	4.3 ±	2.7
Marital Status				
Married	269	,		3.1
Other	188	7,325	35.5 ±	7.0
Infant's Birthweight				
Low	274	2,995	33.6 ±	3.4
Normal	189	24,587	20.4 ±	3.1
Medicaid				
Medicaid at any time1	294	14,745	37.0 ±	5.7
Before pregnancy	123	4,387	29.3 ±	7.9
No Medicaid at any time	167	12,822	14.6 ±	3.1

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

**Table 25**Prevalence of drinking by demographic characteristics 2000 MI PRAMS

	3 Mor	ths Before	Pregnancy		Last	3 Months	of Pregnand	<del></del>
	Sample n Es	stimated N P	ercent(%)9	5% CI	Sample r E	stimated N	Percent(%)	95% CI
Total								
No Drinking	1,178	62,201	48.0 ±	3.4	1,913	125,122	95.2 ±	_
Drinking	802	67,383	52.0 ±	3.4	89	6,382	4.9 ±	1.5
Age								
19 years	70	5,503	$36.4 \pm$	9.7	6	188	1.2 ±	1.1
20-29 years	408	34,528	51.1 ±	4.8	28	1,467	2.2 ±	1.3
30+ years	324	27,352	58.4 ±	5.6	55	4,727	10.0 ±	3.5
Race								
Black	303	6,470	28.0 ±	3.4	49	968	4.2 ±	1.5
Non-black	493	60,439	57.3 ±	4.1	40	5,414	5.1 ±	1.8
Education								
<h.s. graduate<="" td=""><td>112</td><td>6,063</td><td><math>30.8 \pm</math></td><td>7.9</td><td>14</td><td>424</td><td>2.1 ±</td><td>2.3</td></h.s.>	112	6,063	$30.8 \pm$	7.9	14	424	2.1 ±	2.3
H.S. Graduate	264	21,974	49.1 ±	6.1	28	1,348	2.9 ±	1.9
Some College	197	17,909	58.8 ±	6.7	22	2,028	6.6 ±	3.5
College Graduate	202	19,964	63.8 ±	6.7	22	2,535	8.1 ±	3.9
Marital Status								
Married	600	59,124	55.1 ±	3.9	58	5,777	5.3 ±	1.7
Other	199	8,203	37.9 ±	6.8	31	606	2.8 ±	1.3
Infant's Birthweight								
Low	357	3,698	40.7 ±	3.4	40	320	3.5 ±	1.1
Normal	439	63,599	52.8 ±	3.6	49	6,062	5.0 ±	1.6
Medicaid								
Medicaid at any time1	294	15,866	38.9 ±	5.6	40	977	2.4 ±	1.3
Before pregnancy	111	4,310	$27.5 \pm$	7.6	15	325	2.1 ±	1.3
No Medicaid at any time	494	51,050	58.7 ±	4.3	46	5,389	6.1 ±	2.1

<sup>1.</sup> Medicaid at any time was defined as having had Medicaid coverage just before pregnancy occurred, Medicaid-paid prenatal care, or Medicaid-paid delivery.

**Tables 26**Percentage of unintended live births by prenatal care payment source 2000 Michigan PRAMS

		Intended				Unintended			
	Sample n Estimated N Percent(%) 95% CI			Sample n Estimated N Percent(%) 95% CI					
Source of Payment									
Private Health Insurance	690	62,809	68.8 ±	3.8	431	28,548	31.3 ±	3.8	
Medicaid	249	12,529	$34.5 \pm$	5.8	564	23,803	65.5 ±	5.8	
Personal Income	95	9,689	66.5 ±	10.1	66	4,877	$33.5 \pm$	10.1	
Other	33	2,589	52.5 ±	17.6	40	2,340	47.5 ±	17.6	